

Program A: Instruction

Program Authorization: R.S. 17:1751 through 2754; and 2757 through 2759; R.S. 36:651 (D)(6)

PROGRAM DESCRIPTION

The mission of LaSIP's Instruction Program is to promote K-12 mathematics and science education with full integration of technology to prepare Louisiana students for workforce and societal needs of the 21st century.

The goals of the Instruction Program are:

1. Stimulate and support mathematics, science, and technology professional development programs for teachers throughout Louisiana.
2. Promote enhanced student achievement by support the implementation of relevant curricula and assessment methods which fully integrate appropriate technology.
3. Evaluate the impact of LaSIP's efforts since 1992 on student, teachers, and schools throughout Louisiana and determine the implications of these findings for future directions regarding statewide reform.

The Instruction Program includes the following activities:

1. Professional Development Projects - Professional development projects are developed through meaningful collaboration among school systems and universities and are competitively funded based on recommendations of out-of-state consultants knowledgeable about standards-based mathematics and science education. The projects are designed to enhance teachers' content knowledge, improve instruction and assessment approaches, and integrate appropriate technology through real-world applications. In FY 1999-2000, 85 - teachers from 420 schools in 60 districts participate in LaSIP/Delta RSI professional development projects. The total number of teachers who have participated in LaSIP professional development projects since 1992 is 6,791 from all 66 school districts. These teachers are impacting about 300,000 students during FY 1999-2000. In 1999-2000 LaSIP continue to find its traditional professional development projects at an annual maximum of \$150,000 per year. LaSIP/Delta RSI funded 30 professional development projects, 15 in mathematics and 15 in science. LaSIP/Delta RSI introduced District Enhancement Grants (DEGs), with maximum funding of \$25,000 per year, to promote high quality professional development at the district level. Nine DEGs have been funded in 1999-00. The cost per participant for traditional professional development projects in 1998-1999 was \$4,140 for 120-200 hours of contact over a full year, depending on the type of program. It is expected that participant receive supporting classroom materials form LaSIP and their schools and districts. Since 1991, BESE and BoR have each provided \$1 million per year from LEQSF funds, and BoR has allocated Louisiana's higher education Eisenhower funds (approximately \$1 million per year) to the LaSIP Professional Development Initiative. The funding cycle for LaSIP professional development projects is fifteen months allowing projects be funded for more than one fiscal year. FY 1999-2000 funding for LaSIP professional development projects in approximately \$3.4 million.
2. Advanced Math Project – Known as the Advanced Mathematics Project (AMT) during 1995-97 and Louisiana Mathematics and Science Technology Project (LaMaST) from 1997-99, is designed to put graphing calculators and data collection devices in the hands of high school students enrolled in mathematics and science classes and to assist their teachers in understanding and using this technology. This project, a collaboration among the state's mathematics and science teacher and supervisor professional organizations, the Louisiana Department of Education (LDE), and LaSIP, help ensure that Louisiana high school students are competitive with the rest of the nation. Graphing calculators are now being allowed on the Scholastic Achievement Test (SAT), the American College Test (ACT), and the Advanced Placement (AP) Test. The Advanced Math Technology project supplies graphing calculators and calculator-based laboratories to all project participants at a per pupil expenditure of approximately \$16. Survey data collected from students during Spring 1999 indicated that 92.1% believed that working with the equipment helped them understand concepts better, 72% reported improved results. Teacher participants supported these observations with 78.5% reporting that there had been evidence of greater student achievement, and 98% indicating they would recommend the program to their colleagues. Louisiana ACT scores, an indicator of program impact, have steadily risen to 19.6 in Spring '99, up 1 full point from 18.6 in the baseline years of FY 1993-94 and FY 1994-95. LaSIP and the professional organizations contribute funds and human resources to provide professional development for teachers. In FY 1999-2000, it is expected that LaMaST will involve 2000 teachers from 90 schools and 60 districts. Since 1995, a total of 900 secondary mathematics and science teachers have participated in the AMT and LaMaST programs, impacting over 70,000 students. BESE has allocated \$1.69 million to the program, with all monies dedicated to purchasing equipment.
3. In September 1998 NSF funded a Technology in Education (TIE) grant. The "Delta Framework for Integrating Technology (Delta In Tech)," developed and administered by LaSIP, is a two-year \$482,000 project, which provides professional development for rural districts as they implement technology.

GENERAL PERFORMANCE INFORMATION: PROFESSIONAL DEVELOPMENT PROJECTS

PERFORMANCE INDICATOR	PRIOR YEAR ACTUAL FY 1994-95	PRIOR YEAR ACTUAL FY 1995-96	PRIOR YEAR ACTUAL FY 1996-97	PRIOR YEAR ACTUAL FY 1997-98	PRIOR YEAR ACTUAL FY 1998-99
Number of LaSIP professional development projects funded	25	28	27	27	29 ¹
Number of project participants (K-12) teachers served	830	822	807	963	907
Number of schools served	455	415	440	421	418
Number of districts served	59	56	62	60	61
Local administrative cost	\$317,844	\$322,301	\$315,655	\$319,670	\$330,000
Annual cost per teacher	\$4,215	\$3,939	\$3,958	\$3,456	\$4,140

¹ This figure also includes the Delta Rural Systemic Initiatives professional development projects.

GENERAL PERFORMANCE INFORMATION: ADVANCED MATH PROJECT

PERFORMANCE INDICATOR	PRIOR YEAR ACTUAL FY 1994-95	PRIOR YEAR ACTUAL FY 1995-96	PRIOR YEAR ACTUAL FY 1996-97	PRIOR YEAR ACTUAL FY 1997-98	PRIOR YEAR ACTUAL FY 1998-99
Number of teachers served by the Advanced Math Project	Not available ¹	204	200	220	206
Number of students served by the Advanced Math Project	Not available ¹	20,000	40,000	60,000	80,600
Number of school sites served	Not available ¹	185	157	93	74
Number of school districts served	Not available ¹	57	53	51	39
ACT mathematics scores	18.6 ²	18.7	18.9	18.8	18.9
Annual cost per classroom	Not available ¹	\$1,600	\$1,600	\$1,600	\$1,600

¹ The Advanced Mathematics Project introduced in 1995 targeted individual mathematics teachers. In 1997, with the advent of the data collection device, the project became known as Louisiana Mathematics and Science Technology (LaMaST).

² Baseline year.

OBJECTIVES AND PERFORMANCE INDICATORS

Unless otherwise indicated, all objectives are to be accomplished during or by the end of FY 2000-2001. Performance indicators are made up of two parts: name and value. The indicator name describes what is being measured. The indicator value is the numeric value or level achieved within a given measurement period. For budgeting purposes, performance indicator values are shown for the prior fiscal year, the current fiscal year, and alternative funding scenarios (continuation budget level and Executive Budget recommendation level) for the ensuing fiscal year (the fiscal year of the budget document).

The objectives and performance indicators that appear below are associated with program funding in the Base Executive Budget for FY 2000-01. Specific information on program funding is presented in the financial sections that follow performance tables.

1. (KEY) Through the Professional Development Projects activity, to fund approximately 37 professional development projects impacting 1,000 teachers.

Strategic Link: This objective links to LaSIP Strategic Objective to fund approximately 50 professional development projects involving a total of 1600-1800 teachers by April 2000.

LEVEL	PERFORMANCE INDICATOR NAME	PERFORMANCE INDICATOR VALUES					
		YEAREND PERFORMANCE STANDARD FY 1998-1999	ACTUAL YEAREND PERFORMANCE FY 1998-1999	ACT 10 PERFORMANCE STANDARD FY 1999-2000	EXISTING PERFORMANCE STANDARD FY 1999-2000	AT CONTINUATION BUDGET LEVEL FY 2000-2001	AT RECOMMENDED BUDGET LEVEL FY 2000-2001
K	Total number of LaSIP professional development ¹ projects funded	27	29	35	35	37	37
K	Number of project participants (K-12 teachers) served per year	850	907	850	850	1,000	1,000
K	Percentage of LaSIP teachers' students who meet or exceed basic performance levels on the criterion referenced tests in math	Not applicable ²	81.8%	60.0%	60.0%	60%	60%
S	Percentage increase in the total number of project participants	Not applicable ²	18%	18%	18%	15% ³	15% ³
S	Annual cost per project participant	Not applicable ²	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000

¹ This figure includes District Enhancement Grants (DEG's). DEG's are \$25,000 grants to districts which require a significant cost share to provide high quality professional development to district teachers.

² New indicators added for FY 1999-2000, therefore the indicators have no yearend standard for FY 1998-1999.

³ As the total number of teachers impacted by the LaSIP program increases, the percentage increase becomes slightly smaller each year.

2. (KEY) Through the Advanced Math Project activity, to continue to provide graphing calculators and calculator-based laboratories to 200 high school mathematics and science teachers each year accompanied with the necessary training on the use of the equipment to assist them in preparing all 9th and 10th graders for the LEAP test and new state assessment to be introduced in July 2001.

Strategic Link: *This objective links to the LaSIP Strategic Plan Objective to provide classroom sets of graphing calculators and data collection devices to 200 mathematics and science teachers annually to assist in preparing students (9th and 10th graders) for the LEAP test in 2001.*

LEVEL	PERFORMANCE INDICATOR NAME	PERFORMANCE INDICATOR VALUES					
		YEAREND PERFORMANCE STANDARD FY 1998-1999	ACTUAL YEAREND PERFORMANCE FY 1998-1999	ACT 10 PERFORMANCE STANDARD FY 1999-2000	EXISTING PERFORMANCE STANDARD FY 1999-2000	AT CONTINUATION BUDGET LEVEL FY 2000-2001	AT RECOMMENDED BUDGET LEVEL FY 2000-2001
K	Number of Louisiana Math, Science and Technology Project (LaMaST) participants	220	206	200	200	200	200
K	Number of students impacted	Not applicable ¹	18,000	18,000	18,000	18,000	18,000
S	Number of school sites served	93	98	90	90	90	90
S	Number of school districts served	55	52	60	60	60	60
S	Cost per teacher ²	\$1,600	\$1,590	\$1,600	\$1,600	\$1,500	\$1,500
S	ACT mathematics score	Not applicable ³	18.8	Not available ⁴	18.8	18.8	18.8

¹ The indicator was changed for FY 1999-2000. The indicator previously appeared as the "cumulative number of students served by the Advanced Math Project."

² To better serve the equipment needs of teachers and schools, LaSIP contracted \$3,000 with each school team for selection of materials from an approved equipment list. All program monies were dedicated to purchasing equipment.

³ New indicator added for FY 1999-2000, therefore the indicator has no yearend standard for FY 1998-1999.

⁴ Baseline data was being developed for this new indicator, therefore a performance standard was not available for this indicator for FY 1999-2000.

3. (KEY) Through the Rural Systemic Initiatives (RSI) program to target 21 rural parishes in Louisiana to enhance teachers' content understanding of mathematics and science and update their skills with the latest teaching methodologies and the integration of technology in the classroom.

LEVEL	PERFORMANCE INDICATOR NAME	PERFORMANCE INDICATOR VALUES					
		YEAREND PERFORMANCE STANDARD FY 1998-1999	ACTUAL YEAREND PERFORMANCE FY 1998-1999	ACT 10 PERFORMANCE STANDARD FY 1999-2000	EXISTING PERFORMANCE STANDARD FY 1999-2000	AT CONTINUATION BUDGET LEVEL FY 2000-2001	AT RECOMMENDED BUDGET LEVEL FY 2000-2001
K	Number of professional development projects funded	Not applicable ¹	4	4	4	11 ²	11 ²
K	Number of teachers served	Not applicable ¹	503	500	500	500	500 ³
K	Number of students impacted	Not applicable ¹	12,383	16,000	16,000	16,000	16,000 ³
K	Annual cost per teacher	Not applicable ¹	\$4,051	\$4,000	\$4,000	\$1,750	\$1,750 ³
S	Number of schools served	Not applicable ¹	91	62	62	90	90 ³
S	Number of districts served	Not applicable ¹	16	13	13	21	21 ³

¹ New indicators added for FY 1999-2000, therefore the indicator has no yearend standard FY 1998-1999.

² Includes both traditional Professional Development Projects and District Enhancement Grants (DEG's). However, this does not include mini-grants funded by this program.

³ Statistics include all projects funded by the program, including mini-grants.

RESOURCE ALLOCATION FOR THE PROGRAM

	ACTUAL 1998-1999	ACT 10 1999- 2000	EXISTING 1999- 2000	CONTINUATION 2000 - 2001	RECOMMENDED 2000 - 2001	RECOMMENDED OVER/(UNDER) EXISTING
MEANS OF FINANCING:						
STATE GENERAL FUND (Direct)	\$0	\$52	\$52	\$52	\$0	(\$52)
STATE GENERAL FUND BY:						
Interagency Transfers	1,528,267	1,747,500	1,747,500	1,901,073	1,751,073	3,573
Fees & Self-gen. Revenues	0	0	0	0	0	0
Statutory Dedications	0	0	0	0	0	0
Interim Emergency Board	0	0	0	0	0	0
FEDERAL FUNDS	77,558	126,000	126,000	(350,000)	0	(126,000)
TOTAL MEANS OF FINANCING	<u>\$1,605,825</u>	<u>\$1,873,552</u>	<u>\$1,873,552</u>	<u>\$1,551,125</u>	<u>\$1,751,073</u>	<u>(\$122,479)</u>
EXPENDITURES & REQUEST:						
Salaries	\$0	\$0	\$0	\$0	\$0	\$0
Other Compensation	0	0	0	0	0	0
Related Benefits	0	0	0	0	0	0
Total Operating Expenses	6,699	0	0	0	0	0
Professional Services	0	0	0	0	0	0
Total Other Charges	1,260,761	1,523,552	1,523,552	1,201,125	1,401,073	(122,479)
Total Acq. & Major Repairs	338,365	350,000	350,000	350,000	350,000	0
TOTAL EXPENDITURES AND REQUEST	<u>\$1,605,825</u>	<u>\$1,873,552</u>	<u>\$1,873,552</u>	<u>\$1,551,125</u>	<u>\$1,751,073</u>	<u>(\$122,479)</u>
AUTHORIZED FULL-TIME						
EQUIVALENTS: Classified	0	0	0	0	0	0
Unclassified	0	0	0	0	0	0
TOTAL	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

SOURCE OF FUNDING

The source of funding for this program is Interagency Transfers: the Louisiana Quality Education Support Fund (8(g)) and a grant award from the National Science Foundation entitled Rural System Initiative. The NSF grant is transferred from Northeast Louisiana University. The Louisiana Quality Education Support Fund allocation provides a \$1.0 million match for the National Science Foundation math and science grant; a \$200,000 match for the Rural Systemic Reform Initiative for professional development in math, science and technology; and, a direct allocation of \$350,000 to purchase graphing calculators for high schools.

ANALYSIS OF RECOMMENDATION

GENERAL FUND	TOTAL	T.O.	DESCRIPTION
\$52	\$1,873,552	0	ACT 10 FISCAL YEAR 1999-2000
			BA-7 TRANSACTIONS:
\$0	\$0	0	None
\$52	\$1,873,552	0	EXISTING OPERATING BUDGET – December 3, 1999
\$0	\$350,000	0	Acquisitions & Major Repairs
\$0	(\$350,000)	0	Non-Recurring Acquisitions & Major Repairs
\$0	(\$122,427)	0	Other Adjustments - This is an adjustment reflecting an expiring grant.
(\$52)	(\$52)	0	Technical Adjustment
\$0	\$1,751,073	0	TOTAL RECOMMENDED
\$0	\$0	0	LESS GOVERNOR'S SUPPLEMENTARY RECOMMENDATIONS
\$0	\$1,751,073	0	BASE EXECUTIVE BUDGET FISCAL YEAR 2000-2001
			SUPPLEMENTARY RECOMMENDATIONS CONTINGENT ON SALES TAX RENEWAL:
\$0	\$0	0	None
\$0	\$0	0	TOTAL SUPPLEMENTARY RECOMMENDATIONS CONTINGENT ON SALES TAX RENEWAL
			SUPPLEMENTARY RECOMMENDATIONS CONTINGENT ON NEW REVENUE:
\$0	\$0	0	None
\$0	\$0	0	TOTAL SUPPLEMENTARY RECOMMENDATIONS CONTINGENT ON NEW REVENUE
\$0	\$1,751,073	0	GRAND TOTAL RECOMMENDED

The total means of financing for this program is recommended at 93.5% of the existing operating budget. It represents 100.1% of the total request (\$1,749,820) for this program. An expiring grant is responsible for the dramatic decrease in funding in the program.

PROFESSIONAL SERVICES

0 This agency does not have professional services for Fiscal Year 2000-2001

0 TOTAL PROFESSIONAL SERVICES

OTHER CHARGES

\$1,000,000 Interagency transfer from the Board of Secondary and Elementary Education (LaSIP National Science Foundation match)

\$200,000 Interagency transfer from the Board of Secondary and Elementary Education (Delta Rural Systemic Initiatives Program)

\$201,063 Interagency transfer from the University of Louisiana at Monroe

\$1,401,063 SUB-TOTAL OTHER CHARGES

Interagency Transfers:

\$10 Interagency Transfer

\$10 SUB-TOTAL INTERAGENCY TRANSFERS

\$1,401,073 TOTAL OTHER CHARGES

ACQUISITIONS AND MAJOR REPAIRS

\$350,000 Funds for graphing calculators

\$350,000 TOTAL ACQUISITIONS AND MAJOR REPAIRS